

SIMATIC IPC677D (Panel PC), 2x10/100/1000 Mbit/s Ethernet; 4x USB V3.0, 1x serial (COM1); Watchdog, temperature and Fan monitoring; RAID controller onboard; 22" Touch (1920x 1080); with front USB Core i3-4330TE (2C/4T, 2.4 GHz, 4 MB cache, VT-X); PROFINET (IRT, 3 ports, CP 1616-compatible); 2 MB buffered SRAM RAID1 2x 320 GB SATA (2.5"); DVD +/-RW 8 GB DDR3 1600 DIMM; 1x PCIE (X16); 1x PCI 2x USB additive (1 slot occupied) Windows 7 Ultimate 64 bit SP1, MUI (de, en, fr, es, it) SIMATIC IPC DiagMonitor and Image&Partition Creator enclosed AC 110/230V industrial power supply unit with NAMUR; Power supply cable USA

| General information | |
|--|--|
| Product type designation | IPC677D |
| Display | |
| Design of display | 22" TFT touch |
| Screen diagonal | 22 in |
| Resolution (pixels) | |
| • Horizontal image resolution | 1 920 pixel |
| • Vertical image resolution | 1 080 pixel |
| Backlighting | |
| • MTBF backlighting (at 25 °C) | 30 000 h |
| Control elements | |
| Input device | |
| • Mouse, at front | Front USB 2.0 (500mA) |
| Touch operation | |
| • Design as touch screen | Yes; analog, resistive |
| Installation type/mounting | |
| Mounting | For horizontal and vertical mounting |
| Design | Panel PC, built-in unit |
| central design | Yes |
| Mounting in portrait format possible | Yes |
| maximum permissible installation angle +/- | 20° |
| Supply voltage | |
| Type of supply voltage | 100/240 V AC (autorange); 24 V DC |
| Line frequency | |
| • Rated value 50 Hz | Yes |
| • Rated value 60 Hz | Yes |
| Mains buffering | |
| • Mains/voltage failure stored energy time | 10 ms |
| Power loss | |
| In full configuration | 165 W |
| Processor | |
| Processor type | Celeron G1820TE (2C/2T, 2.2 GHz, 2 MB Cache); Core i3-4330TE (2C/4T, 2.4 GHz, 4 MB Cache); Xeon E3-1268L v3 (4C/8T, 2.3 (3.3) GHz, 8 MB Cache, AMT) |
| Chipset | Intel DH82C226 PCH |
| Graphic | |
| Graphics controller | Intel HD graphics controller P4600 GT2 (Xeon, Core i3); Intel HD graphics controller (Celeron) |
| Drives | |
| Optical drives | DVD±RW combi-drive, optional |
| Hard disk | 3.5" SATA ≥ 500 GB, optional: 3.5" SATA ≥ 1 TB; RAID1 2x 2.5" SATA ≥ 320 GB; solid-state drive (SSD) ≥ 240 GB; all hard disk drives within the enclosure are vibration-damped; RAID1 2x 2.5" SATA ≥ 320 GB byte in removable drive bay |
| SSD | Yes; ≥ 240 GB optional |
| Memory | |
| Type of memory | DDR3-1600 DIMM |

| | |
|---|--|
| Main memory | 2 / 4 / 8 / 16 GB; ECC optional |
| Capacity of main memory, max. | 16 Gbyte |
| Data areas and their retentivity | |
| Retentive data area (incl. timers, counters, flags), max. | 2 Mbyte; 128 KB can be stored in the buffer time; optional |
| Hardware configuration | |
| Slots | |
| • free slots | 2x PCI; optional: 1x PCI & 1x PCIe (x16); 2x PCIe (x4, x16); with card retainer |
| • Number of PCI slots | 2 |
| • Number of PCIe slots | 2 |
| Interfaces | |
| PROFIBUS/MPI | Optionally onboard, isolated, max. 12 Mbit/s, compatible with CP 5622 |
| Number of industrial Ethernet interfaces | 2; 2x RJ45 (independent) |
| Number of PROFINET interfaces | 3; Optional |
| USB port | 4x USB 3.0 |
| Connection for keyboard/mouse | USB / USB |
| serial interface | 1x COM1 (RS 232), optional: 1x COM2 (RS 232) |
| parallel interface | optional LPT1 |
| Video interfaces | |
| • Graphics interface | 1x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional) |
| Industrial Ethernet | |
| • Industrial Ethernet interface | onboard, 2x 10 / 100 / 1 000 Mbit, RJ45 |
| — 100 Mbps | Yes |
| — 1000 Mbps | Yes |
| Interrupts/diagnostics/status information | |
| Bus diagnostics | Yes |
| Integrated Functions | |
| Monitoring functions | |
| • Temperature monitoring | Yes |
| • Watchdog | Yes |
| • Status LEDs | Yes |
| • Fan | Yes |
| • Monitoring function via network | Optional |
| EMC | |
| Interference immunity against discharge of static electricity | |
| • Interference immunity against discharge of static electricity | ±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2 |
| Interference immunity against high-frequency electromagnetic fields | |
| • Interference immunity against high frequency radiation | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 |
| Interference immunity to cable-borne interference | |
| • Interference immunity on supply cables | ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric |
| • Interference immunity on signal cables >30m | ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m |
| • Interference immunity on signal cables < 30m | ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m |
| Interference immunity against voltage surge | |
| • asymmetric interference | ±2 kV acc. to IEC 61000-4-5, surge asymmetric |
| • symmetric interference | ±1 kV acc. to IEC 61000-4-5, surge symmetric |
| Interference immunity to magnetic fields | |
| • Interference immunity to magnetic fields at 50 Hz | 100 A/m; to IEC 61000-4-8 |
| Emission of conducted and non-conducted interference | |
| • Interference emission via line/AC current cables | EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A |
| Degree and class of protection | |
| IP (at the front) | IP65 |
| IP (rear) | IP20 |
| Standards, approvals, certificates | |
| CE mark | Yes |
| UL approval | Yes |
| • UL 508 | Yes |
| cULus | Yes |
| RCM (formerly C-TICK) | Yes |

| | |
|---|--|
| KC approval | Yes |
| FCC | Yes |
| EMC | CE, EN 61000-6-4:2007, EN 61000-6-2:2005 |
| Ambient conditions | |
| Ambient temperature during operation | |
| • min. | 5 °C |
| • max. | 45 °C |
| Ambient temperature during storage/transportation | |
| • min. | -20 °C |
| • max. | 60 °C |
| Relative humidity | |
| • Relative humidity | Tested according to IEC 60068-2-78, IEC 60068-2-30: 5% to 80% at 25 °C (no condensation) |
| Vibrations | |
| • Vibration resistance during operation acc. to IEC 60068-2-6 | tested according to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm; 58 Hz to 500 Hz 9.8 m/s ² (1 g) |
| Shock testing | |
| • Shock load during operation | Tested to DIN IEC 60068-2-29: 50 m/s ² (5 g), 30 ms, 100 shocks |
| Operating systems | |
| pre-installed operating system | Windows 7 Ultimate, 32-bit/64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI |
| without operating system | Yes |
| pre-installed operating system | |
| • Windows 7 | Yes; Ultimate 32 bit or 64 bit |
| • Windows 10 Enterprise | Yes; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI |
| Software | |
| SIMATIC Software | Optional package with SIMATIC WinCC or WinAC RTX |
| Dimensions | |
| Width of the housing front | 560 mm |
| Height of housing front | 380 mm |
| Mounting cutout, width | 542 mm |
| Mounting cutout, height | 362 mm |
| Overall depth | 112 mm |
| • additional mounting depth (optical drive) | 26 mm |
| Weights | |
| Weight, approx. | 16 kg |

last modified:

1/31/2021 